DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4 Cty: SF/ALA Rte: 80 PM: 13.2/13.9

> File #: 1.28



WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-015707 Address: 333 Burma Road **Date Inspected:** 16-Jul-2010

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1500 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No

N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A Yes **Qualified Welders:** Yes No **Verified Joint Fit-up:** No N/A

N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: SAS OBG**

Summary of Items Observed:

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 5W/6W, and the following observations were made:

Bike Path Cantilever Beams

The QA Inspector randomly observed the ABF welder identified as Fred Kaddu continue the fillet weld threaded stud repairs associated with CCO#44. The QA Inspector noted it was previously observed and identified that the fillet weld size for the threaded studs did not meet the requirements of the contract documents. The QA Inspector randomly observed the ABF helper perform grinding tasks with a flapper wheel in an attempt to remove the majority of the previous under sized fillet welds, paint and galvanization. The QA Inspector randomly observed the ABF helper working in front of the ABF welder preparing the studs for the fillet welds to be repaired by shielded metal arc welding.

The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Tony Sherwood on site to monitor the in process repairs. The QA Inspector noted the QC inspector set the SMAW machine and parameters to 135 Amps with 1/8" E7018 low hydrogen electrodes. The QA Inspector noted the preheat and welding parameters appeared to be in general compliance with ABF-WPS-D1.5-F1200-A. The QA Inspector randomly observed the ABF welder complete several of the studs on the QA Inspectors shift. It was observed the Bike Path Cantilever Beams identified as:

BK001-022-PP43

BK001-023-PP45

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BK001-016-PP35

BK001-024-PP47

BK001-006-PP31

BK001-008-PP13

were completed on the previous shift. The QA Inspector noted the following bike path cantilevers were completed with welding and visual testing by the end of the QA Inspectors shift:

BK003-001-PP9

BK002-001-PP11

BK001-014-PP17

5W/6W-A

A3-A1

The QA Inspector randomly observed the ABF welding operator Mike Maday continue welding the SAW cover pass near the beginning of weld segment A1. The QA Inspector noted the SAW cover pass for the entire weld joint appeared to be approximately 98% complete. The QA Inspector noted the ABF welder was performing the SAW to correct for a low area of weld reinforcement. The QA Inspector noted the SE QC Inspector Mike Johnson had indicated the areas previously. The QA Inspector randomly observed the SAW parameters and they were 570 Amps, 31.5 Volts and a travel speed of 381mm/min. The QA Inspector noted the SAW parameters appeared to be in general compliance with ABF-WPS-D1.5-4042B-1. The QA Inspector randomly observed the above identified weld joint was complete after the additional welding indicated by the QC Inspector. The QA Inspector noted no additional welding or grinding was performed on the above identified weld joint.

Summary of Conversations:

as noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer